Operating instructions



S-HQ

boiler range

STREBEL

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Important!
It is in your own interest that we should know that you have an STREBEL boiler. Please fill out the warranty card completely and send it back to us. Then we can be fully at your service.

Introduction

These operating instructions describes the functioning and the operating of the STREBEL S-HQ boilers. This manual is for the end user. For installation and servicing there is a installation & servicing instructions manual for the installer.
Read this manual fully before operating the boiler. In case of doubt or errors contact your installer.
STREBEL Ltd. reserves the right to change the specifications and dimensions without prior notice.
Work on the boiler must be carried out by a competent person, (Ref: Gas Safety Installation and Use) using correctly calibrated instruments with current test certification.
When replacing parts use only ATAG Service parts.

In case you smell gas:

- No naked flames! Do not smoke!
- Do not operate electrical switches for lights or any other appliance.
- Do not use a telephone
- Turn off gas supply at meter
- Open windows and doors
- Notify any persons in the building and leave the building at once.
- Call Gas company or installer only when outside the building

Protection for corrosion

Do not use any sprays, chlorine containing agents, solvents, paint etc. around the boiler or around the air intake supply entrance of the boiler. These substances have negative influences on the boiler and can lead to corrosion resulting in failure of the boiler.

Checking the water pressure

Check the water pressure in the central heating installation regularly.
Use only potable water for filling.
Additives only after clearance by STREBEL.
Contact your installer in case of doubt.

Description of the boiler

The STREBEL S-HQ boiler is a room sealed, condensing and modulating central heating boiler, with or without an integrated hot water facility.

Room sealed boiler
The boiler retreives its combustion air from outside then discharges the flue gasses to the outside.

The boiler is provided with a compact stainless steel heat exchanger with smooth tubes. A well thought out principal using durable materials.
The boiler burns gas for supplying warmth. The heat is transferred in the heat exchanger to the water in the central heating system. By cooling down the flue gasses condensate is formed. This results in high efficiency. The condensate, which has no effect on the heat exchanger and the function of the boiler, is drained through an internal siphon.

Condensing
Retrieves heat from the flue gasses. Water condensates on the heat exchanger.

Modulating
Higher or lower burning according to the heat demand.

The boiler is provided with an intelligent control system (CMS Control Management System). The boiler anticipates the heat demand of the central heating system or the hot water facility.

Stainless Steel
Super solid kind of steel which keeps its quality for life. It will not rust or erode in contrast to composition materials, like aluminium.

When an outside sensor is connected to the boiler, the boiler works weather dependantly. This means that the boiler control measures the outside temperature and flow temperature. With this data the boiler calculates the optimal flow temperature for the installation.



BrainQ

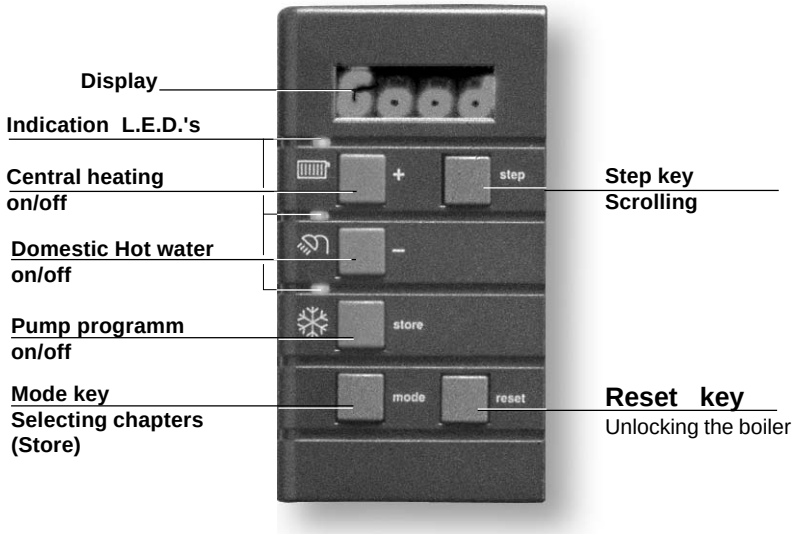


Smart

When the boiler is connected to an BrainQ or Smart a lot of information can be retrieved from the boiler. For more information about the STREBEL thermostats. Please refer to the user manuals.

On the left side of the boiler there is a small door. Through the transparent part you can see the boiler status on the display. After opening this door you will find the function keys. On the right side of the door you will find an instruction card in a sleeve with an explanation of the display messages and function keys. This is also described in the following pages.

Explanation of the function keys and display



On/off key Central heating.
When 'on' the indication **L.E.D.** *is illuminated.*

On/off key Domestic hot water (DHW)
When 'on' the indication **L.E.D.** *is illuminated.*

On/of key Pump programm. Continuously yes/no
When 'on' the indication **L.E.D.** *is illuminated.*

When the pump is switched on continuously it can lead to undesired heating up of the central heating system during the summer.

In most situations the pump can stay in position 'off'.

During severe frost It is possible (when there is no outside sensor connected), to choose manually to let the circulation pump circulate continually thus reducing the chance of freezing pipes (garage, attic or other cold spaces / rooms) which are sensitive to frost.

The Reset key

The control panel is provided with a reset key. When a fault occurs it will be shown by the flashing E (Error) with a number code after which the boiler is shut down. After pressing the reset key you can try to start the boiler again. If the error message keeps occurring contact your installer.

The boiler display

The reading of the boiler display can be done in two ways.



The Good reading

During this reading the display will only show what is necessary. Under normal circumstances the display will give a **Good** reading. If a fault is detected the boiler will be blocked. This will be shown with, alternate display of **Good,** with an **E** of Error or a **BL** of Blocking and a number code. For further information refer to page 13 "Errors, maintenance and warranty" .



The technical reading

During this reading the display will show in which operating status the boiler is active. The technical reading is shown alternately with the water pressure. The first figure in the technical read out indicates the status in which the boiler is active and the third and fourth figure indicate the water temperature of the boiler. For example in the reading **P 1.9** the character **P** stands for pressure which represents the water pressure. The third and fourth figure indicate the water pressure in bar.
If a fault is found, the same is shown as described under "The Good reading".





Selecting the Technical or **Good** reading.



- Press the Step key for 5 seconds.
  The display will change from the Good reading to the technical reading or vice versa.

Water pressure in the central heating system



The installation will function optimally with a water pressure of between 1,5 and 1,7 bar.



If the water pressure drops below 1 bar, the display will show **FILL**. During this message the boiler will remain functioning at a reduced level. After replenishing the system just above 1,5 bar the message **FILL** will disappear and the boiler will function normally again.



When the water pressure drops below 0,7 bar, the display will show a flashing **FILL** text.

The boiler will shut down and will function normally again after replenishing the system to just above 1,5 bar.

Message 'Water pressure too low' on your room thermostat.
On the display of the BrainQ thermostat as well as the Smart thermostat a low water pressure can be indicated. For further information see the relevant user manual.

To retreive the water pressure on the display from the **Good** reading:

- Press the Step key once briefly.
  The water pressure will be shown.

Press the Step key briefly to return to the **Good** reading.

Replenishing the central heating system

The central heating installation needs to be filled with potable (drinking) water. For topping up the installation you use the filling loop according to the following procedure:

(If in any doubt please contact your dealer)

1 Switch all functions off (heating, DHW and pump);

2 Briefly push the 'STEP'-button: P x.x = water pressure in bar;

3 slowly open the filling loop (Indication on display increases);

4 Fill up slowly to 1.5 to 1.7 bar;

5 STOP appears on the display;

6 Close the filling loop;

7 De-aerate the complete installation, start at the lowest point;

8 Check the water pressure and if necessary top it up;

9 Close the filling loop;

10 Activate functions required (heating, DHW and/or pump);

11 If A xx appears on the display, wait for 17 minutes;

12 Check the waterpressure and if necessary top it up to 1,5 to 1,7 bar

13 Close the filling loop;

14 Press the 'STEP'-button;

15 Be sure that the filling loop is closed.

After the automatic de-aeration programm (A xx) is finished the boiler will return to the **Good** reading or Technical reading.

The boiler will not function directly. The automatic de-aeration programm of about 17 minutes will start after one of the three programm keys is pressed. The display will show  ***where A stand s for Automatic de-aeration programm Active and the number on the right indicates the actual water temperature of the boiler.***

Check the water pressure regularly and top up the installation when necessary.
The working pressure of the installation should be between 1.5 and 1.7 bar

It can take a while before all air has dis-appeared from a filled installation. Especially in the first week noises can be heard which indicate the presence of air. The automatic air vent in the boiler will make this air disappear, which means the water pressure will reduce during this period and therefore topping up with water will be necessary to adjust the flow water temperature

Turning the boiler off

Holiday
The BrainQ room thermostaat is provided with a holiday programm. The holiday period can be adjusted on the thermostat itself. The central heating and DHW supply are switched off during that period. There is also the option that only the central heating is switched off. With all of these possibilities the frost protection system is active.

Holiday period:
Adjust the thermostat to the holiday period. See the user thermostat manual. The hot water facility can be switched off by means of the program key on the control panel.

Re-setting the central heating system:
Switch off the three program keys , , when these are activated.Switch off the power supply. When the boiler is being drained one should take into account that a part of the heating water will remain in the boiler. When risk of frost arises one should take care that the remaining central heating water in the boiler does not freeze.

Error, maintenance and warranty





If a fault is detected the boiler will be blocked. This will be reflected, by an alternate display of **Good,** with an **E** of Error or a **BL** of Blocking and a number code.
You can try to reset the boiler by pressing the Reset key once. If the problem remains please contact your installer and inform them about the fault and give them the number code.

If you discover any leaks from the boiler contact your installer.

We advise you to obtain a service contract with your installer for regular maintance and adjustment to keep your boiler safe and in good condition.

The casing of the boiler consists of metal and plastic parts which can be cleaned with a normal non abrasive cleaning agent.

You can find the warranty conditions in the warranty card which is supplied with the boiler.

Adjustments

The boiler has a large number of settings options. We advise you to contact your installer for adjusting the boiler to the required settings.

Adjusting the flow water temperature (CH)



- Press the Mode key briefly (from the Technical reading).
  The display will show PARA .



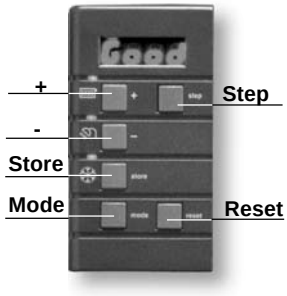
- Press the Step key once.
  The display will show **1 85** .
- Press the + or the - key to alter the adjustments, if necessary.
- Press the Store key to confirm the setting.
  The display will flash once.



- Press the Mode key briefly.
  The display will show **StbY** *for a short while and will return to the Technical reading.*

The flow water temperature that has been adjusted only applies to the central heating and is independent of the hot water facility for the cylinder.

Adjusting the type of installation



The boiler is designed in such a way that it will adjust itself automatically to what is necessary for a normal heating system. In some cases the installation may have convectors or complete underfloor heating.
One can easily choose heating installation adjustments appropriate for the system such as maximum water-flow temperature or for the warming up of the installation after a night period. Adjustment goes as follows:

1 85

- Press (from the Technical) reading the Mode key once;
- Press the Step key twice;

2 01

The display will show **2 01**.

- Press the + or the - key to alter the type of installation according to the table below;
- Press the Store key to confirm the setting;

The display will flash once.

- Press the Mode key once;

StbY

The display will show **StbY** *for a short while and will return to the Technical reading.*

Selection	Type of installation	Flow water temperature
01 ◯	**Radiators; air heating; convectors**	**85°C** ◯
02	**Radiators with large surface areas or under floor heating as additional heating**	**70°C**
03	**Under floor heating with radiators as additional heating**	**60°C**
04	**full under floor heating**	**50°C**

◯ *= factory setting*

When a type of installation has been chosen with a low water-flow temperature it is possible that in case of a severe winter period the temperature of the heating system will need to be increased slightly. In such situations the installation choice may need to be changed, so that a higher flow temperature can be chosen. This adjustment would normally be carried out by your installer during the installation and commissioning.

Details of your installer:

Name of installer:	
Address:	
Contact:	
Phone number:	
Phone number outside business hours:	

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